those in the central segments. This is the older and more popular theory. The "peripheral" theory maintains that the new fibres in the distal segment are formed from pre-existing cells in the distal segment itself. This is the opinion reached by the authors of this book. Their conclusions have an important bearing on the truth or falsity of the neuron theory, because if that theory be true regeneration ought to be impossible in a nerve trunk severed from its trophic centre. Since such regeneration does occur, our authors hold that the neuron theory, in so far at least as it applies to the peripheral nervous system, must be discarded. Whether time will prove that the conclusions of the authors are correct cannot be told; but this much is certain, that fewer men accept the neuron theory now than two years ago. The authors are to be congratulated on their work. There is no padding. The descriptions of the conditions found are brief and clear. The book is well made; the illustrations excellent. C. W. B.

AN EXPERIMENTAL AND CLINICAL RESEARCH INTO CERTAIN PROBLEMS RELATING TO SURGICAL OPERATIONS. An Essay Awarded the Alvarenga Prize for 1901 by the College of Physicians of Philadelphia. By GEORGE W. CRILE, A.M., M.D., Ph.D., Professor of Clinical Surgery, Medical Department, Western Reserve University; Surgeon to St. Alexis' Hospital; Associate Surgeon to Lakeside Hospital, Cleveland. Philadelphia: J. B. Lippincott Co., 1901.

THIS essay comprises an experimental and clinical research into certain subjects suggested by the writer's practical experience in the operating-room, and includes a study of the effects of severing and mechanically irritating the vagi, the effects of the intravenous infusion of salt solution, the physiological action of cocaine and eucaine, and the effects of temporary closure of the carotid arteries. The experiments were conducted on dogs, cats, and frogs, and extended over a period of three years. The author first reviews the literature of the subject under discussion, then sets down the details of the experiments, and finally points out the practical application of the results of the study, and gives a number of clinical histories to fortify the conclusions reached. The phenomena noted in the laboratory closely corresponded with those met in the operating-room.

Crile finds that no amount of mechanical irritation, even to the extent of destroying the vagi, is sufficient to arrest the heart's action, and that severing one vagus has practically no effect on respiration or circulation. He demonstrates that the blood pressure can be raised little if at all above the normal by the intravenous injection of salt solution, owing to its rapid escape from the vessels and to the automatic action of the medulla. When peripheral resistance is lost, as in fatal shock, no amount of infusion can do more than temporarily restore the blood pressure, and death is inevitable. It is interesting to note that Crile was able to amputate at the shoulder-joint in a woman, seventy-four years of age, without shock or hemorrhage, by employing one-eighth grain of cocaine in solution injected into the brachial plexus. Eleven operations about the head are recorded, in which the annoyance and danger of hemorrhage were entirely obviated by the application of a

specially constructed clamp to the dissected-out carotid artery. Experiments showed that this clamp could be left in position, closing the artery from twenty-four to forty-eight hours, without injury to the vessel's walls.

Unlike many interesting writings on surgical physiology, this volume is distinctly practical, and Dr. Crile deserves a great deal of credit for the infinite pains he has taken in conducting the researches. A sufficient number of illustrations are incorporated to elucidate the text.

F. T. S.

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS. Edited by SOLOMON SOLIS COHEN, A.M., M.D. Vol. VI. DIETOTHERAPY AND FOOD IN HEALTH. By NATHAN S. DAVIS, JR., A.M., M.D., Professor of the Principles and Practice of Medicine in Northwestern University Medical School; Physician to Mercer Hospital and Wesley Hospital, Chicago; Member American Medical Association, American Climatological Society, etc. Pp. ix., 372. Philadelphia: P. Blakiston's Son & Co., 1902.

IN Part I. the General Principles of Diet and Diet in Health are presented in one hundred and seventy pages, divided into thirteen chapters. Here we find a full presentation of the results of laboratory research, charts and tables based upon them, and special chapters on Diet in Health, Infant Feeding, and Food as a Cause of Disease. Chapter IX. is devoted to beverages, and the alcohol question is conservatively and, indeed, discreetly managed—perhaps with a greater leaning toward discretion than modern investigation would likely carry us. In Part II., Diet in Disease is presented in twelve chapters, opening with one on Feeding of the Sick, which contains many common-sense ideas and practical points. Of these much can be said in praise. Of distinguished mention should be the fact that the author has conscientiously endeavored to translate the results of mathematical research into rules which may guide the practitioner in his labor for the welfare of his patients. In the main we find but little to criticise, and these points are rather matters of individual opinion and personal practice. For a brief, or rather a condensed, statement of what plan should be pursued in the presence of various pathological symptoms and conditions we heartily commend this part to the student and physician. A very complete index adds much to the usefulness of the work. To what may we attribute the successful result of the labors of the author? In the first place, he is writing at an auspicious time. The important investigations of Atwater are accessible, and have reached that point when they have furnished a sound working basis for clinical completion. Next, the analytical studies found in the work of Hutchinson were at hand, for comparison chiefly, at the later period of the work. Finally, the profession is fortunate in possessing an author who combines extensive information and broad, practical experience, with a judicial temperament. The opportunity and the mind to gain the greatest advantage from it have given as a result a compact, practical, and authoritative text-book, without the dogmatism of the laboratory alone or the speculation of unaided experience. The same combination of experiment and observation and theory and practice is bringing about great advances in